

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1. (Allowed) A recombinant or isolated collagen binding integrin subunit $\alpha 10$ consisting of SEQ ID NO: 2 or fragments thereof, wherein the fragments are selected from the group consisting of amino acid 952 to amino acid 986 of SEQ ID NO: 2, amino acid 140 to amino acid 337 of SEQ ID NO:2, and SEQ ID NO: 7.

Claims 2 to 22. (Canceled)

Claim 23. (Currently Amended) A recombinant or isolated collagen binding integrin subunit $\alpha 10$ consisting of SEQ ID NO: 2 or fragments thereof ~~A fragment of the integrin subunit $\alpha 10$~~ , wherein the fragment is a peptide comprising SEQ ID NO: 7.

Claim 24. (Currently Amended) A recombinant or isolated collagen binding integrin subunit $\alpha 10$ consisting of SEQ ID NO: 2 or fragments thereof ~~A fragment of the integrin subunit $\alpha 10$~~ , wherein the fragment is a peptide comprising amino acid 952 to amino acid 986 of SEQ ID NO: 2.

Claim 25. (Currently Amended) A recombinant or isolated collagen binding integrin subunit $\alpha 10$ consisting of SEQ ID NO: 2 or fragments thereof ~~A~~

~~fragment of the integrin subunit $\alpha 10$~~ , wherein the fragment is a peptide comprising amino acid 140 to amino acid 337 of SEQ ID NO: 2.

Claims 26 to 125. (Canceled)

Claim 126. (Previously Presented) The integrin subunit $\alpha 10$ of claim 138, wherein the integrin subunit $\alpha 10$ is a polypeptide attached to a detectable moiety for detecting presence of transplanted cartilage or transplanted chondrocyte cells expressing said polypeptide in a subject transplanted with said cartilage or chondrocyte cells.

Claims 127 to 137. (Canceled)

Claim 138. (Allowed) A recombinant or isolated collagen binding integrin subunit $\alpha 10$ comprising SEQ ID NO: 2 or fragments thereof, wherein the fragments are amino acid 952 to amino acid 986 of SEQ ID NO: 2, amino acid 140 to amino acid 337 of SEQ ID NO: 2, or SEQ ID NO: 7.

Claim 139. (Currently Amended) A recombinant or isolated collagen binding integrin subunit $\alpha 10$ consisting of SEQ ID NO: 2 or fragments thereof A ~~fragment of the integrin subunit $\alpha 10$~~ , wherein the fragment is a peptide consisting of SEQ ID NO: 7.

Claim 140. (Currently Amended) A recombinant or isolated collagen binding integrin subunit $\alpha 10$ consisting of SEQ ID NO: 2 or fragments thereof A

~~fragment of the integrin subunit α 10~~, wherein the fragment is a peptide consisting of amino acid 952 to amino acid 986 of SEQ ID NO:2.

Claim 141. (Currently Amended) A recombinant or isolated collagen binding integrin subunit α 10 consisting of SEQ ID NO: 2 or fragments thereof A ~~fragment of the integrin subunit α 10~~, wherein the fragment is a peptide consisting of amino acid 140 to amino acid 337 of SEQ ID NO:2.

Claim 142. (Allowed) A recombinant or isolated collagen binding integrin subunit α 10 consisting of SEQ ID NO:4 or fragments thereof wherein the fragments are selected from the group consisting of amino acid 140 to amino acid 337 of SEQ ID NO:2 and SEQ ID NO:7.

Claim 143. (Allowed) A recombinant or isolated collagen binding integrin subunit α 10 comprising SEQ ID NO: 4 or fragments thereof wherein the fragments are selected from the group consisting of amino acid 140 to amino acid 337 of SEQ ID NO:2 and SEQ ID NO:7.

Claim 144. (Previously Presented) A method of determining the differentiation of cells during development comprising:

- (i) obtaining cells; and
- (ii) assaying the cells for the expression of an integrin subunit α 10 or a fragment thereof of claim 1 or for the expression of a nucleic acid which encodes said integrin subunit α 10, or fragment thereof, and

wherein the cells are selected from the group consisting of chondrocytes, smooth muscle cells, endothelial cells, osteoblasts, or fibroblasts, or stem cells of said cells.

Claim 145. (Previously Presented) A method for detecting transplanted cartilage or chondrocyte cells comprising obtaining a sample of cells from a patient transplanted with said cells, and assaying said sample for the expression of an integrin subunit $\alpha 10$ or a fragment thereof of claim 1 or for the expression of a nucleic acid which encodes said integrin subunit $\alpha 10$, or fragment thereof.

Claim 146. (Previously Presented) The integrin subunit $\alpha 10$ of claim 143, wherein the integrin subunit $\alpha 10$ is a polypeptide attached to a detectable moiety for detecting presence of transplanted cartilage or transplanted chondrocyte cells expressing said polypeptide in a subject transplanted with said cartilage or said chondrocyte cells.